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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,758	07/17/2003	Hiroyuki Takahashi	723-1412	9151
23117	7590	09/12/2005	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			BROOME, SAID A	
			ART UNIT	PAPER NUMBER
			2671	

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/620,758	TAKAHASHI ET AL.
	Examiner Said Broome	Art Unit 2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 17 July 2003.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-26 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-26 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 19 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The preamble of claim 5 contains means plus function language which is used in an apparatus claim, and the contents of the body are directed towards a method claim. Therefore it is difficult to distinguish whether the claim is directed towards a method or apparatus. Claim 19 refers to an image processing method of claim 13, however claim 13 is directed towards an image processing program that is stored on a computer readable medium for execution by a processing system. Claim 26 refers to an image processing method according to the independent claim 20. However, the preamble of the independent claim 20 refers to an image processing apparatus and therefore claim 26 improperly references the image processing method.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 13 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hot Shots Golf 3 Golfer's Handbook (Playstation 2 game, published by SCEA).

Regarding claims 1 and 5, The Hot Shots Golf 3 Golfer's Handbook displays the generation of a 3D golf course within a 3D space on page 12. The Hot Shots Golf 3 Golfer's Handbook also shows a grid rendered on a surface on page 16, and the combination of several grid lines rendered in vertical and horizontal directions on page 17. It is also shown from The Hot Shots Golf 3 Golfer's Handbook that sections of the grid contain points on the grid lines in the vertical and horizontal directions on page 17. The formation of grid lines from several grid line elements is shown on page 16, in which several grid lines are formed from grid line elements intersecting in vertical and horizontal directions. The number of line segments for grid rendering is shown to be dependent on the slope of the surface and the distance from the player to the hole as shown on page 16. The flow of an object on the golf course surface is determined from visually directive points that flow at a speed responsive to the degree of slope on the surface, which is illustrated on page 17.

The Hot Shots Golf 3 Golfer's Handbook also describes what is disclosed in claims 2, 6, 13 and 20. A grid rendered on a surface is illustrated on page 16 and one or more moving grid line elements are described and illustrated on page 17 where it is explained that points that lie over the grid move in response to the degree of slope. It is also shown on page 16 that the spacing of the grid lines, which are particular lengths between grid line elements, are rendered at a responsive speed to the slope of the surface of the virtual golf course. This is shown in the picture on page 16 where it is shown that the spacing of the grid lines decreases as the distance from the player to the hole increases, as well as when the slope of the surface changes. Therefore

the speed of a golf ball object remains constant until the gradient of the terrain, or other factors that would impact game play as described on page 15, changes while traveling over a surface.

The Hot Shots Golf 3 Golfer's Handbook describes what is disclosed in claim 3. It is described on page 17 that the grid lines on the surface are rendered with a visual direction that displays the direction coincident with the slope of the surface in response to the ball during game play as illustrated in the picture on the same page. The limitation of claim 4 is also described in The Hot Shots Golf 3 Golfer's Handbook where a generated golf course land surface is illustrated on page 16. It is shown on page 4 that an input device or controller enables a user to play a golf game generated within a virtual space, which is shown on page 16.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7-12, 14-19 and 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hot Shots Golf 3 Golfer's Handbook in view of Muramori et al. (US 2002/0196263).

The Hot Shots Golf 3 Golfer's Handbook teaches what is disclosed in claims 7, 14 and 21 except for the grid line elements each containing a head and tail section. Muramori et al. teaches a grid line containing a head and tail section in paragraph 0050 lines 5-7 and is also illustrated in Figure 4. It would have been obvious to one of ordinary skill in the art to combine the teachings

of The Hot Shots Golf 3 Golfer's Handbook with the grid line head and tail sections of Muramori et al. because this combination improves the processing of individual grid line elements by enabling the processor to store the values of the head and tail section to determine several mathematical attributes of the grid such as speed of objects on the surface, and the slope of the virtual golf course.

The Hot Shots Golf 3 Golfer's Handbook teaches what is disclosed in claims 8, 15 and 22 except for the increase in the number of grid line elements as the slope changes. Muramori et al. teaches a derivation in the number of grid line elements in response to the slope of the surface in paragraph 0047 lines 1-5. It is also illustrated in Figure 3 that as the slope increases, the number of grid line elements increases. It would have been obvious to one of ordinary skill in the art to combine the teachings of The Hot Shots Golf 3 Golfer's Handbook with the increase of grid line elements based on the slope as taught by Muramori et al. because this combination would produce a more accurate display of the gradient of a golf course surface during a virtual golf game which differentiates between elevations by displaying higher elevated areas of a golf course with an increase in the number of grid lines and lower elevations with a decrease in the number of grid lines.

The Hot Shots Golf 3 Golfer's Handbook teaches what is disclosed in claims 9, 16 and 23 except for storage of the number of elements for each respective grid line. Muramori et al. teaches that there is polygon and texture data stored on a storage medium, which comprises the number of grid line elements that form the polygon grid of the surface of the golf course, in paragraph 0040 lines 11-12. It would have been obvious to one of ordinary skill in the art to combine the teachings of The Hot Shots Golf 3 Golfer's Handbook with the storage component

of Muraromi et al. because this combination produces faster access of polygon data for rendering three dimensional objects when the golf game program is executed on a computer readable medium.

The Hot Shots Golf 3 Golfer's Handbook teaches what is disclosed in claims 10, 17 and 24 except for the grid line elements generated from textures. Muramori et al. teaches that a texture is applied to each polygon and each grid line that forms the surface in paragraph 0039 lines 1-7. It would have been obvious to one of ordinary skill in the art to combine the teachings of The Hot Shots Golf 3 Golfer's Handbook with the applied textures to grid line as taught by Muramori et al. because this combination would produce a surface of a virtual golf course which appears green in grassy areas and has various sloped areas.

The Hot Shots Golf 3 Golfer's Handbook teaches what is disclosed in claims 11, 18 and 25 except for the movement of grid lines affected by the displacement of textures while the game is displayed. Muramori et al. teaches that the textures that are applied to the polygons that are formed with grid lines move in response to the slope of the surface in which those grid lines are located. It is also described that the grid lines and textures are sent to the monitor apparatus to be displayed in paragraph 0039 lines 1-7, and a display frame is illustrated in Figure 5. It would have been obvious to one of ordinary skill in the art to combine the teachings of The Hot Shots Golf 3 Golfer's Handbook with the movement of grid lines affected by the displacement of textures as taught by Muramori et al. because this combination produces a virtual golf course whose textures move as the grid lines that form the surface move, thereby accurately displaying the slopes of the golf course.

The Hot Shots Golf 3 Golfer's Handbook teaches what is disclosed in claims 12, 19 and 26 except for the generation of grid lines from a reference texture. Muramori et al. teaches that texture data is stored on the storage medium D, which is illustrated in Figure 1. Therefore the textures, which are contained on a storage medium, are referenced and applied to the grid lines as stated in paragraph 0039 lines 1-7. It would have been obvious to one of ordinary skill in the art to combine the teachings of The Hot Shots Golf 3 Golfer's Handbook with the referencing of textures as taught by Muramori et al. because this combination produces a golf game program that processes an accurate representation of the texture of a virtual golf course surface within a golf game program by referencing those textures from a storage medium.

It is also apparent from Muramori et al. that the image processing apparatus described in the preamble of claims 1-4 and 20-25, the image processing method described in claims 6-12 and the image processing program described in claims 13-18 are all described in paragraph 0012 lines 1-8.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references are made of record because they pertain to 3D golf video games: Kelson et al., Matsuyama et al., Kunzle et al, Sugimoto and Imaeda et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Said Broome whose telephone number is (571) 272-2931. The examiner can normally be reached between 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571) 272-7782. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Broome
8/31/05 *SB*

Ulka J. Chauhan
ULKA J. CHAUHAN
PRIMARY EXAMINER